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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,644

12/13/2005

Hans Negle

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10/30/2008

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

THOMAS, JAISON P

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

10/30/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/560,644	<b>Applicant(s)</b> NEGLE, HANS	
	<b>Examiner</b> Jaison P. Thomas	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 9-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8 and 13-15 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is responsive to amendments filed on 7/29/2008.
2. The rejections of Claim 7 and 8 under 35 USC 112, second paragraph as lacking antecedent basis is withdrawn and substituted with rejections detailed below.
3. The rejections of Claims 1-6 under 35 USC 102(b) as being anticipated by Viebranz et al. (US Patent 5756936) are withdrawn in view of Applicant's amendments.
4. Claims 1-4 and 13-15 stand rejected under 35 USC 102(b) as being anticipated by Negle (EP 1176856).
5. Claims 7 and 8 stand rejected under 35 USC 103(a) as being obvious over Negle (EP 1176856) in view of Allen et al. (US Patent 6541534).

### ***Response to Arguments***

6. Applicant's arguments filed 7/29/2008 have been fully considered but they are not persuasive.

The Applicant contends that Negle does not teach a foam material wherein a second material is added to the foam to change the electrical conductivity of the composite material such that surface charges generated can be effectively dissipated. The Applicant also contends that Negle does not teach microspheres with particle sizes of up to 100 micron as required by Claim 3. With respect to Claim 8, Applicant contends that the secondary reference does not suggest the addition an adhesion promoter to the matrix as opposed to the surface of the microsphere.

The Examiner respectfully disagrees with the Applicant. As noted in the previous Office Action, Negle clearly teaches a composite material comprised of a matrix foam and further containing hollow spheres which have diameters starting at 10 micron and expanding to 40 micron upon heating. Insofar as the presence of any additional filler materials (e.g. in this case the microspheres described in para. 0029) in any foam matrix can alter the overall electrical properties of the composite material, the Examiner concludes that the properties alluded to in Claims 1 and 2 are inherently met. The Examiner also notes that Claim 3 limitations are met since the phrase "of up to about" in Claim 3 would include 10 and 40 microns as described in the prior art. With respect to Claim 8, the Examiner concludes that the location of the adhesion promoter, whether on the surface of the microsphere or in the matrix, is immaterial since the claim merely requires that an adhesion promoter be added the composition comprised of the spherical particles and the basic substance.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 7 and 8 recites the limitation "basic substance" or "the basic substance" in line 3 of each claim. There is insufficient antecedent basis for this limitation in the claim.

Claims 1 and 2 make no reference to a "basic substance" as required by Claims 7 and 8. The Applicant is suggested to amend "basic substance" to --foam material--.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-4,13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Moore et al. (US Patent 4219791).

Moore et al. teaches an electrical inductive apparatus wherein the insulating members of the transformer device, located inside the walls of the transformer device (see Figure 1), are made of binder filled with microspheres (Col. 7, lines 53-55) wherein the microspheres are made of glass or fly ash (Col. 7, lines 60-67). The microspheres have a diameter of 100 microns or less (Col. 8, line 15). The binder has a dielectric constant which can be altered by the presence of the microspheres (Col. 8, lines 30-35). The radial spacers (i.e. one type of insulating member) have example compositions disclosed wherein these compositions can be made into syntactic foams (Col. 9, lines 25-45).

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al. (US Patent 4219791) in view of Frantz et al. (US Patent 3670091).

Moore et al. is relied upon as disclosed above. However, Moore does not teach the use of spherical particles made of the materials as disclosed in Claim 5.

Frantz et al. teaches a protective coating used for encapsulating electrical components wherein a flexible matrix such as a thermosetting binder contains glass spheres or microballoons. These spheres can be made of glass, polystyrene, acrylonitrile polymers and phenolics (Col. 2, lines 1-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the glass spheres of Moore et al. with the spheres of Frantz et al. since substitution of prior art equivalents are within the level of ordinary skill in the art.

13. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al. (US Patent 6541534).

Moore et al. is relied upon as disclosed above. However, Moore does not teach the use of adhesion promoters.

Allen et al. teaches a polyurethane foam for use in automotive applications where hollow microspheres such as glass or polymeric spheres are integrated into a polyurethane foam via coating the spheres with adhesion promoter such as a silane compound (Col. 8, lines 30-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize adhesion promoters such as silane compounds in the foam of Moore et al. to yield a predictable result of achieving better integration of microspheres into a polymeric matrix.

***Allowable Subject Matter***

14. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison P. Thomas whose telephone number is (571) 272-8917. The examiner can normally be reached on Mon-Fri 9:30 am to 6:00 pm.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. P. T./  
Examiner, Art Unit 1796

/Mark Kopec/  
Primary Examiner, Art Unit 1796